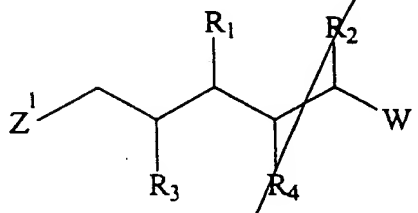
WE CLAIM:

1. A compound or a physiologically acceptable salt thereof, wherein the compound has the formula:



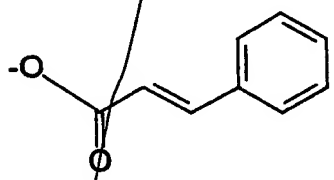
wherein:

R_1 and R_2 are the same or different and are independently H or R;

R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be optionally substituted with a substituent selected from the group consisting of: -OH; =O; $-OR_5$; $-O_2CR_5$, -SH; $-SR_5$; $-SOCR_5$; $-NH_2$; $-NHR_5$; $-NH(R_5)_2$; $-NHCOR_5$; $NRCOR_5$; -I; -Br; -Cl; -F; -CN; $-CO_2H$; $-CO_2R_5$; -CHO; $-COR_5$; $-CONH_2$; $-CONHR_5$; $-CON(R_5)_2$; -COSH; $-COSR_5$; $-NO_2$; $-SO_3H$; $-SOR_5$; and $-SO_2R_5$, wherein R_5 is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

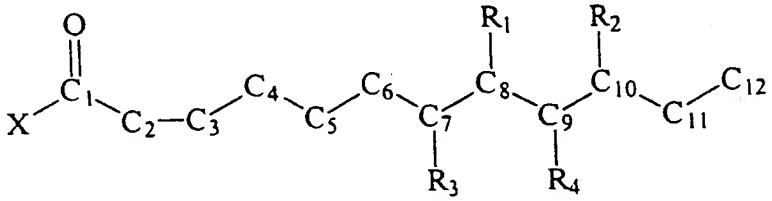
R_3 and R_4 are different and are independently selected from the groups consisting of OH,

(a)



3. The compound or physiologically acceptable salt thereof of claim 1 or 2 wherein Z^1 is a linear or branched, saturated or unsaturated one to eight carbon carbonyl optionally substituted with a substituent selected from the group consisting of: NH_2, NHR, NR_2, OH, OR, SH, SR, H and CF_3, wherein R is as defined.

4. A compound or a physiologically acceptable salt thereof, wherein the compound has the formula:



wherein:

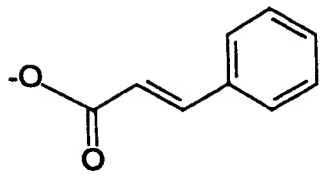
a single, double or triple bond exists between one or more of: C-2 and C-3; C-3 and C-4; C-4 and C-5; and, C-5 and C-6;

X is NH_2, NHR, NR_2, OH, OR, SH, SR, H, or CF_3;

R is a structural fragment having a saturated or unsaturated linear, branched, or cyclic, skeleton containing one to ten carbon atoms in which the carbon atoms may be optionally substituted with a substituent selected from the group consisting of: -OH; =O; $-OR_5$; $-O_2CR_5$, -SH; $-SR_5$; $-SOCR_5$; $-NH_2$; $-NHR_5$; $-NH(R_5)_2$; $-NHCOR_5$; $NRCOR_5$; -I; -Br; -Cl; -F; -CN; $-CO_2H$; $-CO_2R_5$; -CHO; $-COR_5$; $-CONH_2$; $-CONHR_5$; $-CON(R_5)_2$; -COSH; $-COSR_5$; $-NO_2$; $-SO_3H$; $-SOR_5$; and $-SO_2R_5$, wherein R_5 is a linear, branched or cyclic, one to ten carbon saturated or unsaturated alkyl group;

R_1 and R_2 are the same or different and are independently H or R;

R_3 and R_4 are different and are selected from the group consisting of: OH,

(a) 

and

(b) —O—Z—Ar

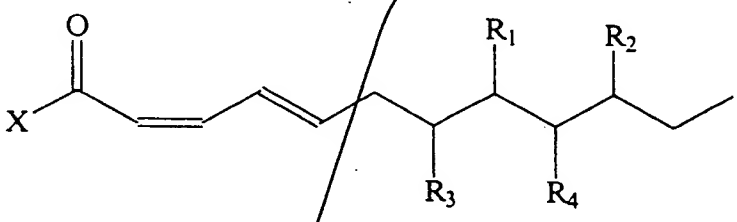
wherein, Z is a linear or branched, saturated or unsaturated, one to ten carbon fragment optionally substituted with Y;

Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing heterocyclic rings, optionally substituted with R or Y;

Y is selected from the group consisting of: H; =O, -OH; -OR; -O_2CR; -SH; -SR; -SOCR; -NH_2; -NHR; -NH(R)$_2$; -NHCOR; NRCOR; -I; -Br; -Cl; -F; -CN- -CO_2H; -CO_2R; -CHO; -COR; -$CONH_2$; -CONHR; -CON(R)$_2$; -COSH; -COSR; -NO_2; -SO_3H; -SOR; -SO_2R; and, -O- (epoxide);

with the proviso that one of R_3 and R_4 is (a) or (b), and another of R_3 and R_4 is OH.

5. The compound or physiologically acceptable salt thereof of claim 4 having the structure:



12. A compound according to claim 4, wherein the compound is Basiliskamide A substantially free of cellular contaminants.

13. A compound according to claim 4, wherein the compound is Basiliskamide B substantially free of cellular contaminants.

14. A pharmaceutical composition comprising a compound or physiological salt thereof of any one of claims 1-13, and a pharmaceutically acceptable carrier.

15. The use of a compound or physiological salt thereof of any one of claims 1-13, as an antifungal agent.

16. The use of a compound or physiological salt thereof of any one of claims 1-3, as an antimycobacterial agent.

and

(b) $-O-Z-Ar$

wherein,

Z^1 and Z are linear or branched, saturated or unsaturated, one to ten carbon fragments optionally substituted with Y;

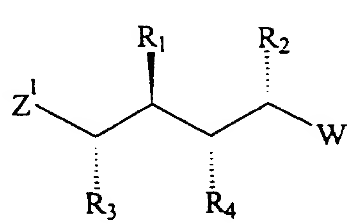
Ar is a monocyclic, bicyclic or tricyclic, fully or partially aromatic system containing five or six membered carbocyclic or, oxygen, nitrogen or sulphur containing heterocyclic rings, optionally substituted with R or Y;

Y is selected from the group consisting of: H; =O, -OH; -OR; $-O_2CR$; -SH; -SR; -SOCR; $-NH_2$; -NHR; $-NH(R)_2$; -NHCOR; NRCOR; -I; -Br; -Cl; -F; -CN- $-CO_2H$; $-CO_2R$; -CHO; -COR; $-CONH_2$; -CONHR; $-CON(R)_2$; -COSH; -COSR; $-NO_2$; $-SO_3H$; -SOR; $-SO_2R$; and, -O- (epoxide);

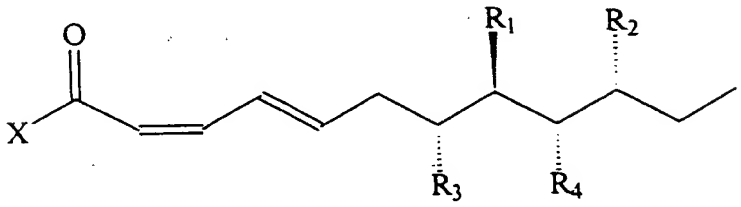
W is H or R;

with the provisos that when W is H, R_2 is not H; when R_2 is CH_3, W is not n-propyl; and, one of R_3 and R_4 is (a) or (b) and another of R_3 and R_4 is OH.

2. The compound or physiologically acceptable salt thereof of claim 1 having the stereoisomeric form:



6. The compound or physiologically acceptable salt thereof of claim 4, having the structural and stereoisomeric form:



7. The compound or physiological salt thereof of any one of claims 4-6, wherein R_1 and R_2 are independently H or CH_3.

8. The compound or physiological salt thereof of any one of claims 4-7, wherein R_3 is (a).

9. The compound or physiological salt thereof of any one of claims 4-8, wherein X is NH_2.

10. The compound or physiological salt thereof of any one of claims 4-9, wherein R_3 at C_7 is (a) and R_3 at C_9 is OH.

11. The compound or physiological salt thereof of any one of claims 4-9, wherein R_3 at C_7 is OH and R_3 at C_9 is (a).